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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,323	10/31/2000	Charles E. Schinner	10002064-1	3237

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EXAMINER
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JERABEK, KELLY L

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 03/03/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/703,323

Applicant(s)

SCHINNER, CHARLES E.

Examiner

Kelly L. Jerabek

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/3/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 10 and 11 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 10 includes a contrast algorithm that adjusts the contrast level whenever the brightness algorithm determines that the back light level is at a maximum. This information is already included in claim 7. Claim 11 is objected to under the same grounds since it is dependent on claim 10.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-4, and 12-13 rejected under 35 U.S.C. 102(e) as being anticipated by Rai et al. US 2002/0050974.**

Re claims 1 and 3, Rai discloses a LCD display unit (100) with a light collecting mechanism. A light-receiving device (1) measures the ambient light in the proximity of the display unit (100) (page 3, paragraph 45). The light-receiving device (1) is connected to a control circuit of the LCD display unit (100) that adjusts the brightness and contrast in accordance with the output signal of the light-receiving device (1) (page 3, paragraph 46).

Re claim 2, the light source (114) of the LCD display unit (100) is turned on and off according to the output signal of the first light receiving element (1). Therefore, when the light source (114) is turned on it is at a maximum intensity level. Furthermore, the contrast ratio is adjustable in accordance with the light that illuminates the LCD display unit (100) (page 4, paragraph 58). It can be seen in figure 5B that the contrast level is adjusted when the light source (114) is set at a maximum level corresponding to ON.

Re claim 4, the display illuminator is a backlight display illuminator (110).

Re claim 12, see claim 1.

Re claim 13, see claim 2.

**Claim 6 rejected under 35 U.S.C. 102(e) as being anticipated by Miller et al.  
US 6,411,306.**

Re claim 6, Miller discloses in figure 4 a digital camera (10) including an image sensor (12), a display illumination sensor (14), a surround luminance sensor (16), a microprocessor (18), a memory (20), and a LCD display device (22) (col. 4, lines 25-30). The ambient light in the proximity of the LCD is measured using the surround luminance sensor (16) (col. 4, lines 34-38). Finally, the backlight level of the LCD is adjusted to a determined ambient light level in order to view images on the LCD (col. 5, lines 15-49).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Rai et al. in view of Cornelissen et al. US 6,329,968.**

Re claim 5, Rai teaches all of the limitations of claim 3, but states that the display system includes a back light illuminator and not a front light display illuminator.

Cornelissen discloses in figure 1 a reflective display device. The display device includes a front light illumination system that is switched on and off in accordance with ambient light levels (col. 5, lines 40-43). Illuminating a display device with either a back light illuminator or a front light illuminator is well known and used in the art. Therefore, it would have been obvious to include the front light illumination system as taught in Cornelissen in the LCD display system disclosed by Rai. Doing so would provide a means for illuminating the LCD display unit in order to allow it to be viewed by a user in a wide variety of ambient lighting conditions.

**Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. in view of Rai et al.**

Re claim 7, Miller teaches all of the limitations of claim 6, but does not state that the contrast is adjusted when the backlight level is at a maximum.

Rai discloses a LCD display unit (100) with a light collecting mechanism. A light-receiving device (1) measures the ambient light in the proximity of the display unit (100) (page 3, paragraph 45). The light-receiving device (1) is connected to a control circuit of the LCD display unit (100) that adjusts the brightness and contrast in accordance with the output signal of the light-receiving device (1) (page 3, paragraph 46). The light source (114) of the LCD display unit (100) is turned on and off according to the output signal of the first light receiving element (1). Thus, when the light source (114) is turned on it is at a maximum intensity level. In addition, the contrast ratio is adjustable in accordance with the light that illuminates the LCD display unit (100) (page 4, paragraph

58). It can be seen in figure 5B that the contrast level is adjusted when the light source (114) is set at a maximum level corresponding to ON. The preceding information clearly shows that the contrast of the display is adjusted when the backlight level is at a maximum. Therefore, it would have been obvious to include the LCD display system as taught in Rai in the digital camera disclosed by Miller. Doing so would provide a means for adjusting the contrast of the LCD display when the backlight level is at a maximum in order to allow it to be viewed by a user in a wide variety of ambient lighting conditions.

Re claim 8, Miller states that the microprocessor (18) retrieves default values from the memory (20) for the display luminance and surround luminance (col. 5, lines 15-30). Since default values for luminance are stored in the memory (20) it would have been obvious to store a default brightness value that is midway between the maximum brightness and the minimum brightness.

***Allowable Subject Matter***

Claims 9-11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fail to anticipate or render obvious the following technical features as recited in the highlighted claims:

- a. "...wherein said contrast algorithm adjusts said contrast level to default contrast level corresponding to said default brightness whenever said liquid crystal display unit is displaying camera status information and not an object image" as recited in claim 9.



***Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kelly Jerabek whose telephone number is (703) 305-8659. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached at (703) 305-4929.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

The fax number for submitting all Official communications is (703) 872-9306.

The fax number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (703) 746-3059.

KLJ

  
VULE  
PRIMARY EXAMINER